

**ABSTRACT OF THE DISCLOSURE**

A process for the production of polyurethane di(meth)acrylates in which 1,6-hexane diisocyanate is reacted, without solvent and without subsequent purification operations, with a diol component and hydroxy-C2-C4-alkyl (meth)acrylate in the molar ratio  $x : (x-1) : 2$ , wherein  $x$  means any desired value from 2 to 5 and the diol component is a combination of two to four (cyclo)aliphatic diols with molar masses of 62 to 600 and wherein each of the diols constitutes at least 10 mol% of the diols of the diol component and powder coating compositions having the polyurethane di(meth)acrylates as a binder.